

Remarks

I. Status of the Application and Summary of the Office Action

A. General

This paper is filed in response to the Office Action mailed on December 15, 2004 and the telephonic interview on April 27, 2005. Claims 1-38 are pending in the present application. Claims 1-19 were pending when the application was last examined and claims 20-38 have been added by this Amendment. Independent claims 1 and 10 have been amended to overcome the Examiner's basis for rejecting them in the December 15, 2004, Office Action. New claims 20-38 are directed to a steering wheel with the fatigue-relieving apparatus of the present invention associated with it. These claims are allowable over the prior art relied on by the Examiner in rejecting claims 1-19. In this Amendment, Applicant will set forth his basis for these positions.

Applicant would like to thank Examiner Luong for the telephonic interview on April 27, 2005. In that Interview, the patentability of pending claims 1-19 were discussed in light of his bases for rejection and, in particular, the patentability of independent claims 1 and 10 was discussed.

On page 2 of the Office Action, the Examiner rejected claim 7 under 35 U.S.C. §112, second paragraph, for not including the term "peripheral" in the phrase "a predetermined portion" in the same manner as claim 1 from which claim 7 depends. Applicant has amended claim 7 so that it is consistent with claim 1 to overcome this rejection and requests that it be withdrawn.

At pages 2-8, the Examiner rejected claims 1-19 under 35 U.S.C. §102(b) as being anticipated separately by U.S. Patent 4,708,676 to Lin ("Lin"), U.S. Patent 4,875,386 to Dickinson ("Dickinson"), and U.S. Patent 3,937,629 to Hamasaka ("Hamasaka"). Applicant has reviewed each of these rejections and the references relied on for the anticipation rejections, and submits that claims 1-19, as amended, overcome each of these rejections. Further, claims 20-28, as written, are patentable over those three references. Therefore, the pending claims, as set forth herein, are in condition for allowance.

Reconsideration and allowance of the claims are respectfully requested.

B. Interview Summary

On April 27, 2005, the Applicant (along with Ms. Pamela Wilson) and undersigned conducted a telephonic interview with the Examiner to discuss the Examiner's bases for rejecting the then pending claims, claims 1-19. In that Interview, Applicant, the undersigned, and the Examiner discussed the teachings of each of the references relied on by the Examiner in rejecting claims 1-19 for anticipation. Applicant, in attempting to understand the Examiner's positions on rejection submits that the Examiner appeared to desire that the claims recite the functional features of the second section in the amended form as now presented in the pending claims. That is, rather than reciting the second section as a "deformable section," reciting that it as a "second section for supporting at least a portion of a vehicular operator's body ... and deforming substantially out of interference with the vehicular operator's ability to operate the steering wheel ..." These functional features of the second section clearly distinguish the pending claims from the prior art relied on by the Examiner in rejecting them. Functional features such as this are appropriate to use as distinguishing features over the prior art. MPEP 2173.05(g).

In the remainder of this Amendment, Applicant will demonstrate that the claims 1-38 are allowable over the prior art relied on by the Examiner in rejecting the claims in the Office Action dated December 15, 2004.

II. U.S. Patent No. 4,708,676 to Lin Does Not Anticipate Claims 1-38

As amended, independent claims 1 and 10 state:

1. A fatigue relieving/preventing apparatus associated with a vehicular control means comprising:
 - a first section that connects to a predetermined peripheral portion of the vehicular control means; and
 - a second section that connects to, and extends from, the first section at the predetermined peripheral portion of the vehicular control means, *with the second section for supporting at least a portion of a vehicular operator's body when pressure from the portion of the vehicular operator's body on the second section is less than the pressure for deforming the second section out of interference with the vehicular operator's ability to operate the vehicular control means, and deforming substantially out of interference with the vehicular operator's ability to operate the vehicular control means when pressure from the portion of the vehicular operator's body on the second section is equal to or greater than the pressure for deforming the second section out of interference*

with the vehicular operator's ability to operate the vehicular control means.

10. A fatigue relieving/preventing apparatus associated with a vehicular control means, comprising:
at least two discrete first sections that each connect to a predetermined peripheral portion of the vehicular control means; and
a discrete second section that connects to, and extends from, each first section at the predetermined peripheral portion of the vehicular control means, ***the discrete-second section for supporting at least a portion of a vehicular operator's body when pressure from the portion of the vehicular operator's body on the second section is less than the pressure for deforming the second section out of interference with the vehicular operator's ability to operate the vehicular control means, and deforming-substantially out of interference with the vehicular operator's ability to operate the vehicular control means when pressure from the portion of the vehicular operator's body on the second section is equal to or greater than the pressure for deforming the second section out of interference with the vehicular operator's ability to operate the vehicular control means.***

For the Examiner's convenience, Applicant has printed in italics and bold the amendments to the claims 1 and 10 that are not taught, suggested, or obvious in view of Lin. The legal standard for finding anticipation is that a single reference must teach each and every claim element, in the same way. *Brown v. 3M*, 265 F.3d 1349 (Fed. Cir. 2001) ("To anticipate, every limitation of the claimed invention must be found in a single prior art reference, arranged as in the claim"); *Kloster Speedsteel AB v. Crucible, Inc.*, 793 F.2d 1565, 1571 (Fed. Cir. 1986) ("absence from the reference of any claimed element negates anticipation"). As will be shown, Lin does not anticipate claims 1 or 10 under this standard. Thus, the rejection based on Lin should be withdrawn.

The Examiner cites Figure 7 of Lin as anticipating claims 1 and 10 of the present invention. In doing so, the Examiner does not rely on what is shown and described in the application but annotates Figure 7 as to what he contends it teaches. In Figure 7, he marks the buoy ring 2 as a "vehicular control means" and "auxiliary air chambers 22" as corresponding to the first and second sections of the apparatus of the invention for fatigue relief. However, the Examiner cites no portion of the specification to support this contention as he must do.

It is to be noted that what is shown in Figure 7 of Lin is the buoy ring turned upside down. In the normal use of the buoy ring, air chambers 22 are underwater and

used to provide the ring with a stable directional effect. (Lin, 2:33-39) Further, when buoy ring 2 is used in the inverted position shown in Figure 7, air chambers 22 are used as “gripping means” (Lin, 3:57-59) not fatigue-relieving elements. It would be commonly understood by a person of ordinary skill in the art that “gripping means” would bring about the opposite effect of fatigue relief.

The Examiner’s contention that buoy ring 2 in Figure 7 is a vehicular control means is misplaced. During the April 27, 2005, Interview, the Examiner contended that by gripping the air chambers, the person in the buoy ring could somehow direct or steer the buoy ring. There is nothing in the specification that would support this position.

In Figure 6 of Lin, the buoy ring is shown in its normal position with oars being used to propel and direct movement of the buoy ring. The oars could be viewed as vehicle control means but not the buoy ring itself.

When the buoy ring is turned upside down as shown in Figure 7, there is nothing to support that in “gripping” the air chambers the person in the buoy ring could direct or control movement of the buoy ring as the Examiner contends. Thus, the buoy ring is not a vehicular control means as would be understood by a person of ordinary skill in the art. To the contrary, all the person can do is just hold on to the air chambers. Accordingly, Lin does not teach what the Examiner contends regarding the buoy ring being a vehicular control means.

The buoy ring of Figure 7, also does not teach the first and second sections of the apparatus of the present invention that includes the functional features of the second section as specified claims 1-10. These functional features include, but are not limited to, the second section deforming substantially out of interference with the use of the vehicular control means when pressure is applied that is equal to, or greater than, the deforming pressure.

The air chambers of Lin are “gripping means” and in no way anticipate the fatigue-relieving aspects of the present invention nor do they move out of interference with the operator when deforming pressure is applied. Moreover, the Examiner has not cited to any portion of the specification to support that these features are carried out by the “gripping means” in Lin. Applicant submits that Lin does not anticipate or render obvious the invention of claims 1 and 10.

Claims 2-9 and 11-19 depend from claims 1 and 10, respectively. Each of the dependent claims adds additional features to claims 1 and 10 from which it ultimately depends. As such, claims 2-9 and 11-19 are not anticipated or rendered obvious by Lin for the same reasons as claims 1 and 10 from which each ultimately depends.

Applicant has added new claims 20-38 by this Amendment. Of these claims 20 and 29 are independent claims. These claims are directed to a steering wheel that includes the features of the present invention. For convenience, claims 20 and 29 state:

20. A fatigue relieving/preventing apparatus associated with a *steering wheel* for controlling a vehicle comprising:

a first section that connects to a predetermined peripheral portion of the *steering wheel*; and

a second section that connects to, and extends from, the first section at the predetermined peripheral portion of the steering wheel, *with the second section for supporting at least a portion of a vehicular operator's body when pressure from the portion of the vehicular operator's body on the second section is less than the pressure for deforming the second section out of interference with the vehicular operator's ability to operate the steering wheel, and deforming substantially out of interference with the vehicular operator's ability to operate the steering wheel when pressure from the portion of the vehicular operator's body on the second section is equal to or greater than the pressure for deforming the second section out of interference with the vehicular operator's ability to operate the steering wheel.*

29. A fatigue relieving/preventing apparatus associated with a *steering wheel* for controlling a vehicle, comprising:

at least two discrete first sections that each connect to a predetermined peripheral portion of the *steering wheel*; and

a discrete second section that connects to, and extends from, each first section at the predetermined peripheral portion of the steering wheel, *the discrete-second section for supporting at least a portion of a vehicular operator's body when pressure from the portion of the vehicular operator's body on the second section is less than the pressure for deforming the second section out of interference with the vehicular operator's ability to operate the steering wheel, and deforming substantially out of interference with the vehicular operator's ability to operate the steering wheel when pressure from the portion of the vehicular operator's body on the second section is equal to or greater than the pressure for deforming the second section out of interference with the vehicular operator's ability to operate the steering wheel.*

As shown above, claims 20 and 29 are directed to a steering wheel with the fatigue-relieving features of the present invention. Referring to Lin, buoy ring 2 that the Examiner has relied on in rejecting claims 1-19 cannot be reasonably construed to be directed to a steering wheel having the inventive features of the present invention.

There are other features of the apparatus of the present invention that also are not found in Lin. Namely, Lin does not teach, suggest, or render obvious the following features of the second section:

“supporting at least a portion of a vehicular operator’s body when pressure from the portion of the vehicular operator’s body on the second section is less than the pressure for deforming the second section out of interference with the vehicular operator’s ability to operate the steering wheel, and deforming substantially out of interference with the vehicular operator’s ability to operate the steering wheel when pressure from the portion of the vehicular operator’s body on the second section is equal to or greater than the pressure for deforming the second section out of interference with the vehicular operator’s ability to operate the steering wheel.”

Applicant has demonstrated that claim 20 and 29 are not anticipated by Lin because Lin does not meet the legal standard for finding anticipation based on a single reference: the single reference must have every limitation of the claimed invention must be found in a single prior art reference, arranged as in the claim. Accordingly, it would be improper for the Examiner to raise an anticipation rejection against claim 20 and 29 when this Amendment is examined.

Claims 21-28 and 30-38 depend from, and add features to, claims 20 and 29. Each of the dependent claims adds additional features to claims 20 and 29 from which it ultimately depends. As such, claims 21-28 and 30-38 are not anticipated or rendered obvious by Lin for the same reasons as claims 20 and 29 from which each ultimately depends.

Applicant has set forth bases that clearly demonstrate that claims 1-38 are not anticipated or rendered obvious by Lin. Therefore, Applicant requests that the Examiner withdraw the anticipation rejection based on Lin that has been applied to claims 1-19 and not raise this rejection against claims 20-38 based on Lin.

III. U.S. Patent No. 4,875,386 to Dickinson Does Not Anticipate Claims 1-38

The Examiner has rejected claims 1 and 10 under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 4,875,386 to Dickinson (“Dickinson”). Dickinson is directed to a “cruise control device” for motorcycles. It is disposed only on the throttle handlegrip of a motorcycle. The device is a lever-type device that “releasably attaches to the existing rotating throttle handlegrip, and is rotatingly adjustable, so as to permit the motorcycle operator to maintain a desired constant throttle setting only by pressure from the heel of the palm of his hand and the adjoining wrist area.” (1:66-2:5)

The device consists of a “single piece of stiff resilient material, having a circular segment which is shaped circularly so as to grip the outer end of the throttle handlegrip, and a lever segment which extends beneath the heel of the palm and adjoining wrist ... in the normal operating position of the throttle handlegrip.” (2:7-13) The downward application of pressure on the lever segment “neutralizes the return force of the carburetor return-to-idle springs, permitting the operator to maintain a constant throttle opening without having to grasp the throttle handlegrip.” (2:15-19) The circular segment tightens as the lever is pushed down. (2:29-35) The lever segment of the device does not deform under downward pressure but remains stiff so that it will continue to rotate the throttle as more downward pressure is applied to increase speed.

If the entirety of the configurations of the Dickinson device shown in the drawings and described in the specification is considered, it is plain that at no time is the lever segment shown to deform out of interference with the operation of the handlegrip on which it is disposed. To the extent that there is any movement in the device, it consists only of the circular segment tightening to ensure positive attachment of the device to the throttle against the return-to-idle springs when downward pressure is applied to the lever segment. The lever segment does not deform out of interference with the motorcycle operator’s operation of the vehicle nor does the Examiner cite a portion of Dickinson that describes or shows this. This makes sense since the intent of the device is to provide a rigid member that can be used as a positive connection to the throttle handlegrip for turning it to increase and decrease speed. If the lever segment, which is being equated to the second section of the present invention, were to deform and bend down out of interference with the operation of the handlegrip, it could no longer be used to control

speed. In such a situation, the motorcycle operator would experience the throttle instantly rotating clockwise back to idle by the return-to-idle springs which could be dangerous. This is clearly not the intent of the Dickinson device. Its intent is for the lever segment to remain stiff and not deform out of interference with the motorcycle operator's operation of the throttle. Therefore, the Examiner's position is directly against the teaching of Dickinson.

Noting the foregoing, the Dickinson device does not anticipate claims 1 and 10 given that the lever segment coupled with the circular segment does not permit the lever section to deform

substantially out of interference with the vehicular operator's ability to operate the vehicular control means when pressure from the portion of the vehicular operator's body on the second section is equal to or greater than the pressure for deforming the second section out of interference with the vehicular operator's ability to operate the vehicular control means.

The lack of this element of claims 1 and 10 is a basis for Dickinson improperly being relied on as an anticipating reference. Moreover, there is no teaching or suggestion in Dickinson that would render claims 1 and 10 obvious in view of the combination of the lever and circular segments. Thus, the Examiner should withdraw the anticipation rejection based on Dickinson as it has been applied to claims 1 and 10.

Claims 2-9 and 11-19 depend from claims 1 and 10, respectively. Each of the dependent claims adds additional features to claims 1 and 10 from which it ultimately depends. As such, claims 2-9 and 11-19 are not anticipated or rendered obvious by Dickinson for the same reasons as claims 1 and 10 from which each ultimately depends.

As stated, Applicant has added new claims 20-38 by this Amendment. Of these claims 20 and 29 are independent claims. These claim are directed to a steering wheel that includes the features of the present invention.

Dickinson is not directed to a steering wheel and this is a first distinguishing feature between the Dickinson, and claims 20 and 29. This forms a first basis for the Dickinson not anticipating or rendering obvious claims 20 and 29.

Like claims 1 and 10, claims 20 and 29 include features directed to second section deforming

substantially out of interference with the vehicular operator's ability to operate the vehicular control means when pressure from the portion of the

vehicular operator's body on the second section is equal to or greater than the pressure for deforming the second section out of interference with the vehicular operator's ability to operate the vehicular control means.

These features of the steering wheel of claims 20 and 29 are not found within the four corners of Dickinson nor would they be obvious in view of Dickinson. This is a second basis for finding that claims 20 and 29 are not anticipated by Dickinson. Therefore, Applicant submits that the anticipation rejection based on Dickinson should not be raised with respect to claims 20-29.

As stated, claims 21-28 and 30-38 depend from, and add features to, claims 20 and 29. Each of the dependent claims adds additional features to claims 20 and 29 from which it ultimately depends. As such, claims 21-28 and 30-38 are not anticipated or rendered obvious by Dickinson for the same reasons as claims 20 and 29 from which each ultimately depends.

Applicant has demonstrated that claims 1-38 are not anticipated or rendered obvious by Dickinson. Therefore, Applicant respectfully requests that the Examiner withdraw the anticipation rejection that has been applied to claims 1-19 and not raise this rejection against new claims 20-38 based on Dickinson.

IV. U.S. Patent No. 3,937,629 to Hamasaka Does Not Anticipate Claims 1-38

The Examiner has rejected claims 1 and 10 under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 3,937,629 to Hamasaka ("Hamasaka"). The patent is directed to handlebar extenders. The device has two parts: a movable bracket and an extension (rod) that is "rigidly and integrally" joined to the bracket. The rod is rigid and extends from the bracket. This rod is bent into a handle at the end. (Abstract) The extensions may be "positioned out of the way or positioned for use with little bother." (1:32-35)

The first part, "band 22," is secured at the desired location with "bolt 44 and nut 46." (1:51-60) The rod connects to band 22. The rod is not for fatigue relief. The extensions (bracket and rod) may be moved to positions 18' and 20' out of the way and secured in that position, but Hamasaka does not show that the rods are "deformable" with respect to the bracket. (2:17-21)

The bracket and rod are welded together at 32 to form a single integrated unit. (2:30-40) There is no resiliency in the device. It is secured and used in the secured position. There is no support in Hamasaka for the Examiner's contention that the device may be moved once secured without unbolting it, moving it, and then rebolting it. Once an extension is in the secured position for use, it would not deform so that it would not interfere with the operator if it got in the way. (See operation, 3:2-14)

Hamasaka does not anticipate claims 1 and 10 given that the single integrated (welded) unit does not permit the rod section to deform in such a manner that the bracket/rod welded unit will deform

substantially out of interference with the vehicular operator's ability to operate the vehicular control means when pressure from the portion of the vehicular operator's body on the second section is equal to or greater than the pressure for deforming the second section out of interference with the vehicular operator's ability to operate the vehicular control means.

The lack of this element of claims 1 and 10 is another basis for Hamasaka being improperly being relied on as an anticipating reference. As such, Applicant traverses the Examiner's basis for rejecting claims 1 and 10 for anticipation. The Examiner should withdraw the anticipation rejection based on Hamasaka as it has been applied to claims 1 and 10.

Claims 2-9 and 11-19 depend from claims 1 and 10, respectively. Each of the dependent claims adds additional features to claims 1 and 10 from which it ultimately depends. As such, claims 2-9 and 11-19 are not anticipated or rendered obvious by Hamasaka for the same reasons as claims 1 and 10 from which each ultimately depends.

Applicant has added new claims 20-38 by this Amendment. Of these claims, claims 20 and 29 are independent claims. These claim are directed to a steering wheel that includes the features of the present invention.

Like Dickinson, Hamasaka is not directed to a steering wheel and this is a first distinguishing feature between Hamasaka, and claims 20 and 29. This forms a first basis for Hamasaka not anticipating or rendering obvious claims 20 and 29.

Like claims 1 and 10, claims 20 and 29 include features directed to second section deforming

substantially out of interference with the vehicular operator's ability to operate the vehicular control means when pressure from the portion of the vehicular operator's body on the second section is equal to or greater than the pressure for deforming the second section out of interference with the vehicular operator's ability to operate the vehicular control means.

These features of the steering wheel of claims 20 and 29 are not found within the four corners of Hamasaka. This is a second basis for finding that claims 20 and 29 are not anticipated by Hamasaka. Therefore, Applicant submits that the anticipation rejection based on Hamasaka is traversed and should not be raised with regard to claims 20 and 29.

Claims 21-28 and 30-38 depend from, and add features to, claims 20 and 29. Each of the dependent claims adds additional features to claims 20 and 29 from which it ultimately depends. As such, claims 21-28 and 30-38 are not anticipated or rendered obvious by Hamasaka for the same reasons as claims 20 and 29 from which each ultimately depends.

Applicant has demonstrated that claims 1-38 are not anticipated or rendered obvious by Hamasaka. Therefore, Applicant respectfully requests that the Examiner withdraw the anticipation rejection that has been applied to claims 1-19 and not raise this rejection against new claims 20-38 based on Hamasaka.

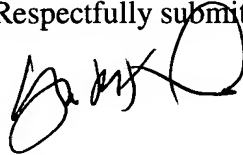
V. Conclusion

The present application is new, non-obvious, and useful. Applicant has traversed each of the Examiner's bases for rejecting the pending 1-38 claims, and Applicant submit that the application is in condition for allowance and respectfully requests that it issue in due course.

Please charge any additional fees that may be required, or credit any overpayments that may be due, to Deposit Account No. 08-0219.

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